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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,988	07/03/2006	Shinichiro Nakayama	CS-12-060703	4090

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EXAMINER
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CONLEY, FREDRICK C

ART UNIT	PAPER NUMBER
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3673

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/596,988	<b>Applicant(s)</b> NAKAYAMA, SHINICHIRO	
	<b>Examiner</b> FREDRICK C. CONLEY	<b>Art Unit</b> 3673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/03/06</u> .   | 6) <input type="checkbox"/> Other: ____.                          |

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 3,002,201 to Nelson et al.

Claim 1, Nelson discloses a pillow including a bottom member and a head placement member disposed above the bottom member, comprising:

a hollow portion defined between fabric layers 12 formed in the head placement member designed so that when a head of a user is placed face-up, the head placement member is depressed by the load of the head; and a biasing mechanism (,7,8,14) disposed in the hollow portion to bias the head placement member upward (col. 2 lines 26-46); wherein the biasing mechanism comprises, provided the side on which a crown portion of the head of a user placed the head placement member is referred to as a rear side and the side on which the neck of the user is placed is referred to as a front side, a pair of X-shaped links (7,8) disposed laterally spaced apart in the hollow portion and each composed of a first link member slanted upward toward the front and front end portions of first link members of the pair of X-shaped links, a rear-side upper connecting member for connecting rear end portions of second link members of the pair of X-shaped links (fig. 6), and a spring member 14 for providing a spring force for

approximating the link members of each X-shaped link in the frontward/rearward direction along a line of action in the frontward/rearward direction with respect to the X-shaped link, so that the pair of X-shaped links are biased toward the upper expanding direction via the spring member (col. 2 lines 7-11). Nelson fails to disclose the distance between the lowermost portion of the head on the head placement member and the bottom member is in the range of 10 mm to 30 mm. It is considered an obvious modification to provide a range of values for a structural component and it would have been obvious for one having ordinary skill in the art at the time of the invention to employ the range stated above in order to provide a support surface that comfortable cradles the head of the user.

Claim 2, Nelson discloses the pillow according to claim 1, wherein the pivotable connecting portion of the link members of each X-shaped link is disposed at a position offset 11 to the rearward direction from the center position in the frontward/rearward direction of the first link member (fig. 6).

Claim 3, Nelson discloses the pillow according to claim 2, wherein the front end portion of the first link member of each X-shaped link is positioned frontward than the front end portion of the second link member (fig. 6).

Claim 4, Nelson discloses the pillow according to claim 1, wherein the spring member is composed of a plurality of tension connecting member 14.

Claim 5, Nelson discloses the pillow according to claim 1, wherein the biasing mechanism is designed so that during depression of the head placement member, the

vertical positional relationship between a line of action of the spring force of the spring member and the pivotable connecting portion of the link members of each X-shaped link is reversed so that the X-shaped links are biased toward the lower contracting direction by the spring member, and further comprising a second spring member (col. 2 lines 18-26) for re-reversing the vertical positional relationship between the line of action of the spring force of the spring member and the pivotable connecting portion by biasing the X-shaped links toward the upper expanding direction resisting against the biasing force of the spring member.

Claim 6, Nelson discloses the pillow according to claim 5, further comprising a rear-side lower connecting member 9 for connecting the rear end portions of the first link members of the X-shaped links, a front-side lower connecting member 10 for connecting the front end portions of the second link members of the X-shaped links, an upper tension spring 14 stretched across the front-side upper connecting member and the rear-side upper connecting member 10, and a lower tension spring 14 stretched across the front-side lower connecting member and member is composed of one of either the upper tension spring or the lower tension spring, and the second spring member is composed of the other tension spring.

Claim 7, Nelson discloses the pillow according to claim 6, wherein at least one connecting member out of the front-side upper connecting member, the rear-side upper connecting member, the front-side lower connecting member and the rear-side lower connecting member is formed of a shaft-like member capable of being rotated for adjustment, and an end portion of the corresponding tension spring out

of the upper and lower tension springs is wound around and fixed to the shaft-like member (fig. 4).

Claim 8, Nelson discloses the pillow according to claim 1, further comprising at least one of a rear-side lower connecting member for connecting the rear end portions of the first link members of the X-shaped links and a front-side lower connecting member for connecting the front end portions of the second link members of the X-shaped links, and having a flexible bridging member stretched across the lower connecting member and the front-side or rear-side upper connecting member on the same side as the lower connecting member, wherein one connecting member out of the lower connecting member and the upper connecting member is formed of a shaft-like member capable of being rotated for adjustment, and an end portion of the bridging member is wound around and fixed to the shaft-like member (fig. 4-5).

Claims 9, 13, and 17, Nelson discloses the pillow according to claim 7, wherein a hole defined by slots between the fabric member 12 and frame members (fig. 1) open toward an end portion of the shaft-like member is formed to the head placement member. With regards to the hole being employed for communication or tool insertion, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Claim 10, Nelson discloses the pillow according to claim 1, wherein the biasing mechanism is covered with a stretchable tube-like cover (fig. 4).

Claim 11, Nelson discloses the pillow according to claim 1, but fails to disclose wherein the size of the hollow portion is designed so as to ensure a clearance between the surface of the head placement member and the ears of a user when the head placement member is depressed by the load of the head of a user in a face-up lying position. It is considered an obvious modification to alter the size of a structural component, and it would have been obvious for one having ordinary skill in the art at the time of the invention to alter the size as stated above in order to provide an alternative design to the pillow of Nelson.

Claim 12, Nelson discloses the pillow according to claim 1, but fails to disclose wherein the head placement member is formed of a molded member made of soft resin. It is considered an obvious modification to select from a plethora of known materials and it would have been obvious for one having ordinary skill in the art at the time of the invention to merely select a well known material such as a molded soft resin for the head placement member in order to provide an alternative surface for the head of a user.

Claim 14, Nelson discloses the pillow according to claim 12, wherein the wall on a front side of the hollow portion is formed so that the cross-sectional shape thereof in the vertical direction during non-depressed state of the head placement member is arced to project toward the front direction (fig. 1).

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 3,002,201 to Nelson et al. in view of U.S. Pat. No. 2,668,964 to Simmons.

Claim 15, Nelson discloses all of the Applicant's claimed limitations, but fails to disclose the head member is constructed of a backing panel. Simmons discloses a backing panel defined by a plate 17 that bears upon a pad 18. It would have been obvious for one having ordinary skill in the art at the time of the invention to employ a panel in combination with a pad layer as taught by Simmons in order to better accommodate the head and neck of the user (col. 2 lines 7-14). With regards to the backing panel being formed of an elastic member that is harder than a low repulsion urethane foam selected for the head member, it is considered an obvious modification to select from a plethora of known materials and it would have been obvious for one having ordinary skill in the art at the time of the invention to merely select a well known materials in order to provide an alternative surface for the head of a user.



Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 3,002,201 to Nelson et al. in view of U.S. Pat. No. 1,327,103 to Knowles.

Claim 16, Nelson discloses all of the Applicant's claimed limitations except for the head placement member being composed of a bag-like body filled with at least one material selected from a group consisting of feather, natural fiber, synthetic fiber, inorganic particles, organic particles and fluid. Knowles discloses a head placement member 32 composed of a bag-like body filled with a material. It would have been obvious for one having ordinary skill in the art at the time of the invention to employ a bag like material and filling as taught by Knowles in order to provide an alternative head placement member. With regards to the bag-like body being filled with feather, natural fiber, synthetic fiber, inorganic particles, organic particles and fluid, , it is considered an obvious modification to select from a plethora of known materials and it would have been obvious for one having ordinary skill in the art at the time of the invention to merely select a well known materials in order to provide an alternative surface for the head of a user.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FREDRICK C. CONLEY whose telephone number is (571)272-7040. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICIA L. ENGLE can be reached on 571-272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/FREDRICK C CONLEY/  
Examiner, Art Unit 3673